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| 09/913,448      | 08/14/2001  | Marek Weltrowski     | BDL-355XX           | 9630             |

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| EXAMINER |
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GRAY, JILL M

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| ART UNIT | PAPER NUMBER |
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1774

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/913,448

Applicant(s)

WELTROWSKI ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 4-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

The rejection of claims 4-20 under 35 U.S.C. 103(a) as being unpatentable over Trinh et al, US 2003/0035748 A1 is withdrawn in view of applicants' amendments.

### ***Claim Objections***

Claims 15 and 16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In particular, claim 15 depends from cancelled claim 14 and claim 16 is redundant.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 7-9, 13, 16 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 is indefinite because the term "phosphate" is broad and inclusive of "dihydrogen phosphate" and "hydrogen phosphate". Accordingly, the metes and bounds for this limitation are not clear.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent

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protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 5 recites the broad recitation "wherein the catalyst is selected from the group consisting of dihydrogen phosphates, hydrogen phosphates, phosphates, hypophosphites, alkali metal phosphates, alkali metal salts of polyphosphoric acids, carbonates, bicarbonates, acetates, borates, alkali metal hydroxides, aliphatic amines and ammonia", and the claim also recites "preferably selected from sodium hydrogen phosphate, sodium dihydrogen phosphate and sodium hypophosphite" which is the narrower statement of the range/limitation.

Claim 7 is indefinite because "x" and "y" are not clearly defined. In particular, when  $x=3$ ,  $y$  becomes  $2 \leq y < 1$ . Hence, the metes and bounds for which patent protection is being sought are not clear.

Claim 8 is indefinite for the reasons set forth above in claims 5 (usage of "preferably") and claim 7, regarding the definition of "x" and "y".

Claim 9 is indefinite for the reasons set forth above in claim 5 regarding the usage of "preferably".

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Claim 13 recites the limitation "said solid mixture" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 is vague and indefinite because "Y\*" is not clearly defined. It is not clear which polycarboxylic acids are included in this grouping.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuscher et al, 5,728,823 (Reuscher).

Reuscher teaches a process for treating fiber and fiber material resulting therefrom, said process comprising impregnating the cellulosic or protein fibrous substrate with an aqueous solution of cyclodextrin, polycarboxylic acid, and catalyst, drying at temperatures within the ranges as claimed in claims 16-17, heating at an elevated temperature, washing the treated fibrous material with water and drying, per claims 11, 13 and 15, resulting in fibrous materials such as yarns, knitted or woven textiles, per claims 7, 8, and 12. See column 12, lines 11-12, column 14, lines 13-41, and column 15, line 26 through column 16, and line 37. The polycarboxylic acid is of the type contemplated by applicants in claims 4, 9, and 20. See column 6, line 55. Also, the catalyst is of the type set forth in claim 5; see column 11, lines 59-67. As to claims 6, 18 and 19, the cyclodextrin is as required by applicants. Note column 4, lines

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33-46. In addition, Reuscher teaches that insecticides can be included, as required by claim 10. See column 13, line 25. Reuscher does not specifically teach a crosslinked copolymer as required by claim 8; nonetheless, he does teach that crosslinkers can be included. Accordingly, it would have been obvious to crosslink the coating to enhance the linkage between the fibrous material and cyclodextrin coating material. Reuscher is silent as to the specific structure as set forth in claims 7 and 8. However, it is the position of the examiner that the teachings of Reuscher of cyclodextrin derivatives necessarily include structures essentially as claimed by applicants, in the absence of factual evidence to the contrary.

Therefore, the prior art teachings of Reuscher would have rendered obvious the invention as claimed in the present claims.

### ***Response to Arguments***

Applicant's arguments with respect to claims 4-20 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'JMG', written in a cursive style.

Jill M. Gray  
Examiner  
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jmg